

Serial No. 10/024,563

Docket No. P-0297

Amdt. dated February 24, 2006

Reply to Office Action of November 29, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for preventing a call collision, comprising:
initializing a call connecting time for a terminal time according to a transmitted random number;
transmitting packet data from the terminal to a Radio Port (RP) during the call connecting time;
increasing the random number with the RP; and
transmitting the increased random number to the ~~terminal~~terminal,
wherein the random number is increased by a predetermined method and the increased random number establishes a new call connecting time, the predetermined method for increasing the random number being based on the expression:
$$RN(I+1)=MOD ((RN(I)+1)/N), \text{ where}$$

MOD indicates modulo division, RN(I) is the ith random number, RN(I+1) is the ith + 1 increased random number, and N is a total number of prospective call connecting times within a predetermined period.

2. (Original) The method of claim 1, wherein initializing the call connecting time comprises:

synchronizing the RP and the terminal;

transmitting controlling information from the RP to the terminal, after synchronization;

checking with the terminal whether there is an error in the controlling information;

checking with the terminal whether a terminal ID, which is carried in the controlling information, and an ID stored by the terminal correspond with each other; and

initializing the call connecting time according to the random number, carried in the transmitted controlling information, with the terminal.

3. (Original) The method of claim 2, wherein the RP repeatedly transmits preamble data to the terminal for synchronization, if the terminal fails to synchronize with the RP.

4. (Currently amended) The method of claim 2, wherein the terminal ~~throws away~~discards the controlling information and sets the call connecting time by itself, if the controlling information contains the error.

5. (Currently amended) The method of claim 2, wherein the terminal ~~throws away~~discards the transmitted controlling information and sets the call connecting time by itself, if the terminal ID carried in the controlling information does not correspond with the ID stored by the terminal.

6. (Original) The method of claim 1, wherein the random number is included in controlling information transmitted to the terminal.

7. (Canceled)

8. (Currently amended) The method of ~~claim 7~~claim 1, wherein the random number is increased by increasing a previous random number of the terminal.

9. (Canceled)

10. (Currently amended) The method of ~~claim 9~~claim 1, wherein the value of N is based on the expression:

$$N=P_1/P_2, \text{ where}$$

P_1 is the predetermined period and P_2 is a call connecting period.

11. (Currently amended) A method for preventing a call collision, comprising:
- receiving controlling information comprising a random number from a Radio Port (RP);
- initializing a call connecting time according to the random number;
- transmitting packet data to the RP at the initialized call connecting time;
- increasing the random number with the RP; and
- transmitting the increased random number to a ~~terminal~~ terminal,
- wherein the random number is increased by a predetermined method, and the increased random number is used to determine a new call connecting time, the predetermined method for increasing the random number being based on the expression:
- $$RN(I+1)=MOD ((RN(I)+1)/N), \text{ where}$$
- MOD indicates modulo division, RN(I) is the ith random number, RN(I+1) is the ith + 1 increased random number, and N is a total number of prospective call connecting times within a predetermined period.

12. (Original) The method of claim 11, wherein receiving the controlling information comprises:
- synchronizing the RP and the terminal;
- transmitting the controlling information from the RP to the terminal; and

receiving the controlling information with the terminal.

13. (Original) The method of claim 12, wherein the RP repeatedly transmits preamble data to the terminal for synchronization, if the RP fails to synchronize.

14. (Original) The method of claim 12, wherein the controlling information comprises a terminal ID and the random number.

15. (Original) The method of claim 11, wherein initializing the call connecting time comprises:

checking with the terminal whether there is an error in the controlling information;

checking whether an ID included in the controlling information corresponds with a terminal ID, if there is no error in the controlling information; and

initializing the call connecting time according to the received random number, if the terminal ID and the controlling information ID correspond with each other.

16. (Currently amended) The method of claim 15, wherein the terminal ~~throws away~~discards the controlling information and sets the call connecting time by itself, if the controlling information contains the error.

17. (Currently amended) The method of claim 15, wherein the terminal ~~throws away~~discards the controlling information and sets the call connecting time by itself, if the terminal ID and the controlling information ID do not correspond.

18. (Original) The method of claim 11, wherein the random number is carried in the controlling information and transmitted to the terminal.

19. (Canceled)

20. (Currently amended) The method of ~~claim 19~~claim 11, wherein the random number is increased based on the expression:

$$\text{Increased random number} = \text{random number} + 1.$$

21. (Canceled)

22. (Currently amended) The method of ~~claim 21~~ claim 11, wherein the value of N is based on the expression:

$$N=P_1/P_2, \text{ where}$$

P_1 is the predetermined period and P_2 is a call connecting period.

23. (Currently amended) A wireless communication system, comprising:
a Packet Data Management Unit (PDMU) that initializes a call connecting time for a wireless terminal time, according to a random number; and

a Radio Port (RP) that transmits the random number to the wireless terminal and receives packet data from the wireless terminal, during the call connecting time; wherein

the PDMU increases the random number, after the RP receives the packet data, and transmits the increased random number to the terminal to establish a next call connecting ~~time~~ time.

wherein the random number is increased by a predetermined method, and the increased random number establishes a new call connecting time, the predetermined method for increasing the random number being based on the expression:

$$\text{RN}(I+1)=\text{MOD} ((\text{RN}(I)+1)/N), \text{ where}$$

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MOD indicates modulo division, $RN(I)$ is the i^{th} random number, $RN(I+1)$ is the $i^{\text{th}} + 1$ increased random number, and N is a total number of prospective call connecting times within a predetermined period.